

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A23CE
Revision 14
BEECH
58P
58PA
58TC
58TCA

April 15, 1996

TYPE CERTIFICATE DATA SHEET NO. A23CE

This data sheet which is part of type certificate No. A23CE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder	Raytheon Aircraft Company 9709 E. Central Wichita, KS 67206
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I - Model 58P, Pressurized Baron, 4, 5 or 6 PCLM (Normal Category), Approved May 21, 1974
Model 58PA, Pressurized Baron, 4, 5 or 6 PCLM (Normal Category), Approved May 12, 1976

For S/N TJ-3 through TJ-168

Engine	Teledyne Continental Motors TSIO-520-L or TSIO-520-LB (2 of either or 1 of each)
Fuel	100LL or 100 minimum grade aviation gasoline 115/145 alternate grade aviation gasoline
Engine limits	(1) With propeller per (a) or (b) and governor per (e): For all operations, 2700 r.p.m. (38 in. Hg. MAP), 310 HP (Critical alt. 22,000 ft.) (2) With propeller per (b) and governor per (f): For all operations, 2600 r.p.m. (38 in. Hg. MAP), 301 HP (Critical alt. 22,000 ft.) Single Engine Operating Limits: 2700 r.p.m. (38 in. Hg. MAP), 310 HP, mechanical control device which cannot be over-ridden by pilot.

For S/N TJ-169 through TJ-435 and TJ-437 through TJ-443

Engine	2 Teledyne Continental Motors TSIO-520-WB
Fuel	100LL or 100 minimum grade aviation gasoline 115/145 alternate grade aviation gasoline
Engine limits	With propeller per (b) or (c) and governor per (e): Take-off and maximum continuous power 2700 r.p.m. (39.5 in. Hg. MAP), 325 HP Maximum normal operating power 2600 r.p.m. (39.5 in. Hg. MAP), 297 HP (for S/N TJ-242 through TJ-435 and TJ-437 through TJ-443) (Critical alt. 22,000 ft.)

For S/N TJ-436, TJ-444 and up

Engine	2 Teledyne Continental Motors TSIO-520-WB
Fuel	100LL or 100 minimum grade aviation gasoline 115/145 alternate grade aviation gasoline

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Engine limits	With propeller per (d) and governor per (e): Take-off and maximum continuous power 2700 r.p.m. (39.5 in. Hg. MAP), 325 HP (Critical alt. 22,000 ft.)	
Propeller and propeller limits	(a) 2 Hartzell three-blade propellers in pairs Diameter: 80 in. (Normal) Minimum allowable for repair 79.5 in. (No further reduction permitted) Pitch settings at 30 in. Sta.: low 13.0°, high 83.0° PHC-J3YF-2F/FC8468-6R or PHC-J3YF-2F/FC84688-6R or PHC-J3YF-2UF/FC8468-6R or PHC-J3YF-2UF/FC8468B-64 or (b) 2 Hartzell three-blade propellers in pairs Diameter: 78 in. (Normal) Minimum allowable for repair 77.5 in. (No further reduction permitted) Pitch settings at 30 in. Sta.: low 15.3°, high 84.0° PHC-J3YF-2F/FC7663DR or PHC-J3YF-2F/FC7663DRB or PHC-J3YF-2UF/FC7663DR or PHC-J3YF-2UF/FC7663DRB or PHC-J3YF-2UF/FC7663DRK (for S/N TJ-349 through TJ-435 and TJ-437 through TJ-443) or (c) 2 McCauley three-blade propellers in pairs Diameter: 78 in. (Normal) Minimum allowable for repair 77.5 in. (No further reduction permitted) Pitch settings at 30 in. Sta.: low 16.1° \pm 2°, high 82.5° \pm .5° 3AF32C511- X /G-82NEA-4 P/N P5115358-01 or (d) 2 McCauley three-blade propellers in pairs Diameter: 78 in. (Normal) Minimum allowable for repair 77.5 in. (No further reduction permitted) Pitch settings at 30 in. Sta.: low 16.1° \pm 2°, high 82.5° \pm .5° 3AF32C511- X /G-82NEA-4 P/N P5115358-01 or P/N P5115358-0152 and (e) Beech 96-380030 governor or (f) Beech 106-389001 governor	
Airspeed limits	Never exceed (Decrease 5 knots per 1000 ft. above 16,000 ft.) Maximum structural cruise (Decrease 4 knots per 1000 ft. above 16,000 ft.) Maximum design maneuver Above 23,000 ft. Maximum flaps extended (15°) Above 21,000 ft. Maximum flaps extended (30°) Maximum landing gear extended Above 21,000 ft. Maximum landing gear operating Above 21,000 ft.	235 knots (270 m.p.h.) 196 knots (226 m.p.h.) 170 knots (196 m.p.h.) 161 knots (185 m.p.h.) 177 knots (204 m.p.h.) 162 knots (186 m.p.h.) 143 knots (165 m.p.h.) 177 knots (204 m.p.h.) 162 knots (186 m.p.h.) 177 knots (204 m.p.h.) 162 knots (186 m.p.h.)

C.G. range (landing Gear Extended)	Model 58P: (+78.4) to (+84.5) at 6100 lb. (TJ-3 through TJ-168) Model 58P: (+79.0) to (+84.5) at 6200 lb. (TJ-169 and up) Model 58PA: (+77.8) to (+84.5) at 5995 lb. (+73.0) to (+84.5) at 5150 lb. or less Straight line variation between points given Landing gear retraction moment (+623 in.-lb.)			
Empty weight C.G. range	None			
Maximum weight (See NOTE 4)		Model 58P (TJ-169 & up)	Model 58P (TJ-3 through TJ-168)	Model 58PA
	Takeoff and landing	6200 lb.	6100 lb.	5995 lb.
	Ramp weight	6240 lb.	6140 lb.	6035 lb.
	Zero fuel weight	5700 lb.	5700 lb.	5700 lb.
No. of seats	6 maximum (2 at +75, 2 at +117, 2 at +150)			
Maximum baggage and/or Optional equipment (Structural limits)	Forward compartment (above floorboard) 300 lb. (+ 15) Rear compartment (aft to Sta. 170.00) 400 lb. (+150) Aft baggage compartment (Sta. 170 to 190) 120 lb. (+180) With 3rd and 4th seats removed for luggage, maximum baggage is as follows: Aft of rear spar cover to Sta. 170.00 400 lb. (+145)			
Fuel capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>
	L&R Main*	86 ea.	83 ea.	+82.7
		<u>Optional Fuel System</u>		
	L&R Main**	98 ea.	95 ea.	+83.4
	See NOTE 1(a) for data on unusable fuel			
	*One left and one right tank. Each tank consists of three interconnected cells - two leading edge cells and one box section cell.			
	**One left and one right tank. Each tank consists of four interconnected cells - two leading edge cells, one box section cell and one integral wet wing tip cell.			
Oil capacity	24 qt. total (12 qt. each engine) at (+37) See NOTE 1(b) for data on unusable oil			
Maximum operating limit	25,000 ft. pressure altitude			
Control surface movements	Wing flaps (up, approach & full down)	0°	15°	30°
	Aileron Up	20°	Down	20°
	Elevator Up	20°	Down	15°
	Rudder Right	25°	Left	25°
	Aileron tab (LH only) Up	10°	Down	10°
	Elevator tab Up	10°	Down	23°
	Rudder tab Right	25°	Left	25°
Serial Nos. eligible	TJ-3 and up			

II - Model 58TC, Turbocharged Baron, 4, 5 or 6 PCLM (Normal Category), Approved January 23, 1976
Model 58TCA, Turbocharged Baron, 4, 5 or 6 PCLM (Normal Category), Approved May 12, 1976

For S/N TK-1 through TK-84

Engine	Teledyne Continental Motors TSIO-520-L or TSIO-520-LB (2 of either or 1 of each)
Fuel	100LL or 100 minimum grade aviation gasoline 115/145 alternate grade aviation gasoline
Engine limits	(1) With propeller per (a) or (b) and governor per (d): For all operations: 2700 r.p.m. (38 in. Hg. MAP), 310 HP (Critical alt. 22,000 ft.) (2) With propeller per (a) and governor per (e): For all operations: 2600 r.p.m. (38 in. Hg. MAP), 301 HP (Critical alt. 22,000 ft.) Single Engine Operating Limits: 2700 r.p.m. (38 in. Hg. MAP), 310 HP, mechanical control device which cannot be over-ridden by pilot.

For S/N TK-85 through TK-146 and TK-148 through TK-150

Engine	2 Teledyne Continental Motors TSIO-520-WB
Fuel	100LL or 100 minimum grade aviation gasoline 115/145 alternate grade aviation gasoline
Engine limits	With propeller per (a) or (b) and governor per (d): Take-off and maximum continuous power 2700 r.p.m. (39.5 in. Hg. MAP), 325 HP Maximum normal operating power 2600 r.p.m. (39.5 in. Hg. MAP), 297 HP (for S/N TK-112 through TK-146 and TK-148 through TK-150) (Critical alt. 22,000 ft.)

For S/N TK-147, TK-151 and up

Engine	2 Teledyne Continental Motors TSIO-520-WB
Fuel	100LL or 100 minimum grade aviation gasoline 115/145 alternate grade aviation gasoline
Engine limits	With propeller per (c) and governor per (d): Take-off and maximum continuous power 2700 r.p.m. (39.5 in. Hg. MAP), 325 HP (Critical alt. 22,000 ft.)
Propeller and propeller limits	(a) 2 Hartzell three-blade propellers in pairs Diameter: 78 in. (Normal) Minimum allowable for repair 77.5 in. (No further reduction permitted) Pitch settings at 30 in. Sta.: low 15.3°, high 84° PHC-J3YF-2F/FC7663DR or PHC-J3YF-2F/FC7663DRB or PHC-J3YF-2UF/FC7663DR or PHC-J3YF-2UF/FC7663DRB or PHC-J3YF-2UF/FC7663DRK (for S/N TK-139 through TK-146 and TK-148 through TK-150) or (b) 2 McCauley three-blade propellers in pairs Diameter: 78 in. (Normal) Minimum allowable for repair 77.5 in. (No further reduction permitted) Pitch settings at 30 in. Sta.: low 16.1° ±.2°, high 82.5° ±.5° 3AF32C511- X /G-82NEA-4

P/N P5115358-01

or	(c) 2 McCauley three-blade propellers in pairs Diameter: 78 in. (Normal) Minimum allowable for repair 77.5 in. (No further reduction permitted) Pitch settings at 30 in. Sta.: low 16.1° ±.2°, high 82.5° ±.5° 3AF32C511-/X//G-82NEA-4 P/N P5115358-01 or P/N P5115358-0152																
and	(d) Beech 96-380030 governor																
or	(e) Beech 106-389001 governor																
Airspeed limits (IAS)	Never exceed 235 knots (270 m.p.h.) (Decrease 5 knots per 1000 ft. above 16,000 ft.) Maximum structural cruise 196 knots (226 m.p.h.) (Decrease 4 knots per 1000 ft. above 16,000 ft.) Maximum design maneuver 170 knots (196 m.p.h.) Above 23,000 ft. 161 knots (185 m.p.h.) Maximum flaps extended (15°) 177 knots (204 m.p.h.) Above 21,000 ft. 162 knots (186 m.p.h.) Maximum flaps extended (30°) 143 knots (165 m.p.h.) Maximum landing gear extended 177 knots (204 m.p.h.) Above 21,000 ft. 162 knots (186 m.p.h.) Maximum landing gear operating 177 knots (204 m.p.h.) Above 21,000 ft. 162 knots (186 m.p.h.)																
C.G. range (landing Gear Extended)	Model 58TC: (+78.4) to (+84.5) at 6100 lb. (TK-1 through TK-84) Model 58TC: (+79.0) to (+84.5) at 6200 lb. (TK-85 and up) Model 58TCA: (+77.8) to (+84.5) at 5995 lb. (+73.0) to (+84.5) at 5150 lb. or less Straight line variation between points given Landing gear retraction moment (+623 in.-lb.)																
Empty weight C.G. range	None																
Maximum weight (See NOTE 4)	<table><tr><td></td><td>Model 58TC (TK-85 & up)</td><td>Model 58TC (TK-1 through TK-84)</td><td>Model 58TCA</td></tr><tr><td>Takeoff and landing</td><td>6200 lb.</td><td>6100 lb.</td><td>5995 lb.</td></tr><tr><td>Ramp weight</td><td>6240 lb.</td><td>6140 lb.</td><td>6035 lb.</td></tr><tr><td>Zero fuel weight</td><td>5700 lb.</td><td>5700 lb.</td><td>5700 lb.</td></tr></table>		Model 58TC (TK-85 & up)	Model 58TC (TK-1 through TK-84)	Model 58TCA	Takeoff and landing	6200 lb.	6100 lb.	5995 lb.	Ramp weight	6240 lb.	6140 lb.	6035 lb.	Zero fuel weight	5700 lb.	5700 lb.	5700 lb.
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No. of seats	6 maximum (2 at +75, 2 at +117, 2 at +150)																
Maximum baggage and/or Optional equipment (Structural limits)	Forward compartment (above floorboard) 350 lb. (+ 15) Center compartment (between spars) 300 lb. (+108) Rear compartment (aft to Sta. 170.00) 700 lb. (+150) Aft baggage compartment (Sta. 170 to 190) 120 lb. (+180)																
Fuel capacity	<table><tr><td><u>Tank</u></td><td><u>Capacity Gal.</u></td><td><u>Usable Gal.</u></td><td><u>Arm</u></td></tr><tr><td>L&R Main*</td><td>86 ea.</td><td>83 ea.</td><td>+82.7</td></tr><tr><td colspan="4"><u>Optional Fuel System</u></td></tr><tr><td>L&R Main**</td><td>98 ea.</td><td>95 ea.</td><td>+83.4</td></tr></table>	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>	L&R Main*	86 ea.	83 ea.	+82.7	<u>Optional Fuel System</u>				L&R Main**	98 ea.	95 ea.	+83.4
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See NOTE 1(a) for data on unusable fuel

*One left and one right tank. Each tank consists of three interconnected cells - two leading edge cells and one box section cell.

**One left and one right tank. Each tank consists of four interconnected cells - two leading edge cells, one box section cell and one integral wet wing tip cell.

Oil capacity	24 qt. total (12 qt. each engine) at (+37) See NOTE 1(b) for data on unusable oil			
Maximum operating limit	25,000 ft. pressure altitude			
Control surface movements	Wing flaps (up, approach & full down)	0°	15°	30°
	Aileron	Up	20°	Down 20°
	Elevator	Up	20°	Down 15°
	Rudder	Right	25°	Left 25°
	Aileron tab (LH only)	Up	10°	Down 10°
	Elevator tab	Up	10°	Down 23°
	Rudder tab	Right	25°	Left 25°
Serial Nos. eligible	TK-1 and up			
<u>Data Pertinent to All Models</u>				
Datum	83.1 in. forward of jack pads on front spar			
Leveling means	2 external screws in frame aft of cabin door on left side. (Use plumb bob) (58P and 58PA) 2 external screws in frame aft of rear cabin window on left side. (Use plumb bob) (58TC and 58TCA)			
Certification basis	Part 23 of the Federal Aviation Regulations, effective February 1, 1965, and Amendments 1 through 12. Part 36, See NOTE 5. Application for type certificate dated July 21, 1972. Type Certificate No. A23CE issued May 21, 1974, obtained by the manufacturer under Delegation Option Procedures. Compliance with ice protection requirements has been demonstrated in accordance with FAR 23.1419 of Amendment 23-14 when ice protection equipment is installed in accordance with Beech Dwg. 102-000018 or Beech Kit Dwg. 102-5006. Equivalent Safety Findings: FAR 23.621 for 58P and 58PA (S/N TJ-3 through TJ-415) and 58TC and 58TCA (S/N TK-1 through TK-150); 23.1323 and 23.1545(a); FAR 23.807(b) (58TC and 58TCA only)			
Production basis	Production Certificate No. 8 issued and Delegation Option Manufacturer No. CE-2 authorized to issue airworthiness certificates under Delegation Option provisions of Part 21 of the Federal Aviation Regulations.			
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. This equipment must include, for all operations, a current FAA Approved Airplane Flight Manual. In addition, the following item(s) of equipment are required: 1. Pre-stall warning indicator, Safe-Flight PN 190-3. 2. For flights in icing conditions, appropriate FAA Approved Airplane Flight Manual and the equipment noted therein.			

NOTE 1. Current weight and balance data, loading information and a list of equipment included in certificated empty weight must be provided for each airplane at the time of original certification.

- (a) Basic empty weight includes unusable fuel of 36 lbs. at (+79).
- (b) Basic empty weight includes engine oil of 45 lbs. at (+37) with 11.8 lbs. being unusable.

NOTE 2. The following "Operation Limitations" must be displayed in clear view of the pilot:
This airplane must be operated as a normal category airplane in compliance with the operating limitations stated in the form of placards, markings and manuals.

NOTE 3. Mandatory retirement times for all structural components are contained in the Limitations Section of the FAA Approved Airplane Flight Manual. These limitations may not be changed without FAA Engineering approval.

NOTE 4. Model 58P airplanes may be converted to Model 58PA airplanes when modified per Beech Aircraft Corporation drawing 102-000017. Model 58PA airplanes may be re-converted to Model 58P airplanes.

Model 58TC airplanes may be converted to Model 58TCA airplanes when modified per Beech Aircraft Corporation drawing 102-000018. Model 58TCA airplanes may be re-converted to Model 58TC airplanes.

NOTE 5. Part 36, Amendments 1 through 4 for 58P and 58PA (S/N TJ-46, TJ-55, TJ-83, TJ-85 through TJ-168) when equipped with propeller per I(b) and governor per I(f) only. Part 36, Amendments 1 through 7 for 58TC and 58TCA (S/N TK-1 through TK-111). Part 36, Amendments 1 through 10 for 58P and 58PA (S/N TJ-242 and up); 58TC and 58TCA (S/N TK-112 and up).

Contact Beech Aircraft Corporation as necessary to obtain availability information concerning the drawings and kits which are referenced by this publication.

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